ترجم القطع التالية للغة العربية :

6. RIGHTS OF ALIENS :

An alien is a person who is not a citizen of this country. In the United States an alien has many, but not all, of the rights of a citizen.

An alien does not have the rights to vote. He cannot hold public office or a government job. He cannot serve on a jury.

However, there are many rights that an alien can enjoy. For example, an alien is protected by the constitution of the United States. The constitution gives him the right to speak freely and the right to worship as he pleases. The alien also has the right to travel and to own property. He has the right to police and fire protection. And he has the right to an education for himself and his family.

Many federal, state, and local laws protect the alien. One of these laws protects the worker who has lost his job. The state pays him a certain amount of money until he can find a job. He may be paid for as long as 36 weeks in some states. The money to pay the worker comes from a special tax paid by the employer.

Anyone can become needy. A person may grow too old to work or become ill. Worst of all, he may die and leave the members of his family with no one to support them.

Many years ago, the federal government began a social security plan for workers. The plan insures working people against the loss of wages caused by old age, injury, illness, or death.

A worker earns his right to social security by paying a special tax. This tax is taken out of wages he earns while working for someone else. If he works for himself, he pays a different kind of tax.

If a man works for someone else, his employer takes a few cents out of each dollar he earns. The employer takes the same amount of his money and sends it with the worker’s money to the government. If a person works for himself, his tax is a little more than if he was working for someone else.

When a person grows old and cannot do much work, he may decide to stop working. Before he retires, he should consider how much money he will receive from social security. He may need it to help pay rent and buy food and clothing.

Word List :

alien	غريب – أجنبي	jury	هيئة المحلفين – المحكمين
constitution	دستور	worship	يعبد – عبادة

insure	يؤمن – يضمن – يكفل	wages	أجور
earn	يكسب – يجني	consider	يفكر

7. TO WELCOME THE SUN :

For most creatures, spring is the season that wakes the spirit after winter's short, cold, pale-sunned days. But the North American human, busy with work and school, taxes and climate, delays his celebration, waiting until summer to begin his rest, play, or travel.

This late welcome to a returning sun is performed on concrete, grass, sand, and water. Between May and July, attendance more than doubles at our national parks. Golf courses swarm with eager players and resound with their happy shouts. Figures crowd the nation's beaches to rest and redden, and the national highway stream with travelers. More than half of the 120 million auto trips taken by Americans each year are taken in the summer.

Still, the solar welcome would be best held in spring, no matter what the harsh cruelties of April. June 21 is the summer solstice. The sun's direct rays reach their northern limit at the Tropic of Cancer. This is the time when there is least atmosphere between the narrow zone of life and the pounding heat of our star. By July, the continent is as hot as it will get, with temperatures running in the mid-seventies. August is usually a few degrees cooler. Not until September does the season's hot grip allow us to return in reasonable comfort to the cares of winter.

But for many, it is too late. In an average year, about 175 Americans die from excessive summer heat. Among our family of natural hazards, only the extreme cold of winter, not lightning, hurricanes, tornadoes, floods, or earthquakes, takes a greater average toll.

Heat waves make a tragic difference. It is not known how many deaths are caused by excessive heat or solar radiation. Heat waves bring great stresses to the human body, especially among the old or sick.

Word List :		hurricane	إعصار
creature	مخلوق – كائن	redden	يحمر – يصبح لونه أحمر
Tropic of Cancer	مدار السرطان	pounding heat	الحرارة الشديدة
solar radiation	أشعة الشمس	flood	فيضان

8- THE MYTH OF THE SPLIT PERSONALITY :

Schizophrenia is a word used to describe a complex mental disorder. It describes a set of conditions, which are not constant, but ever changing. It describes a way of behaving that is not general among all sufferers, but highly personal.

In contrast to many illnesses, it is not found in one part of the body. Rather, it affects all aspects of a person's personality, the way he thinks, acts, and feels. No facts hold true for all schizophrenics. In fact, it is possible for two people to be called "schizophrenic" and to show very different symptoms.

Each person looks at the world from his own point of view. If four people go to see a trapeze show, they might talk about it later very differently. One person might talk about the risks involved in doing tricks in the air. Another might talk about the beauty and grace of the act. Another might talk about the ropes and pulleys. And yet another might talk about the beauty of the performers.

A person found to be schizophrenic might see any one of these four images just as a normal person sees them. Or he might see laughing hyenas, instead of people, swinging on the ropes. Just as each normal person views the world from his own position, the schizophrenic, too, has his own views of reality. However, his view of the world is very different from the usual reality shared by those who are well.

The world of a schizophrenic may be timeless, flat, without depth, without form. Faces may seem to change. The kind, loving face of a wife may suddenly seem harsh and cruel. The schizophrenic knows that his wife's face has not really changed. But for him, it has. He may blink his eyes to try to see again his wife's loving smile. These are images, which can come to bother him.

Very often he knows that what he is seeing is true, but he cannot change his view. A schizophrenic girl described an experience as follows :

"I went to my teacher and said to her, 'I am afraid … …' She smiled gently at me. But her smile, instead of calming me, only made me more nervous. For I saw her teeth, white and even in the gleam of the light. Soon that's all I could see, as if the whole room were nothing but teeth. Terrible fear gripped me."

Word List :

schizophrenia	انفصام الشخصية	schizophrenic	مصاب بالانفصام
symptoms	أعراض المرض	pulley	بَكَرة
timeless	أبدي – خالد – سرمدي	gleam	ومضة – وميض
hyena	ضبع	terrible fear	خوف شديد
trapeze show	عرض بهلواني	grip	يمسك – يقبض على شئ بيده

9. BEAKS AND BILLS :

When one thinks of birds and their mouths, many different types come to mind. An observer might wonder why they are all so different.

Unlike humans who have hands and tools to prepare their foods to fit their mouths, birds must have mouths to fit their foods. A person might study a few different types of birds, the shapes of their mouths, and the types of food they eat.

Having a backyard feeder allows one to be most familiar with the seed eaters. They have short, stout bills that are well suited for cracking hard seed coats to expose the tender kernels. The sharp tip of the beak is useful for capturing insects, which are also part of their diet.

Insects play a large part in the diet of many birds. Insect eaters have thin bills that allow them to remove insects and insect eggs from in and among the leaves and pieces of bark.

There are also flying insect eaters. Although these birds have tiny, weak beaks, their mouths open wide like traps to scoop up insects in flight. Purple martins, members of the swallow family, are well known for their insect eating abilities. People often build martin houses to attract them.

Woodpeckers have hard bills with which they hollow out their nests and bore for grubs in tree bark. Woodpeckers have long bills and, like hummingbirds, they are the only birds with tongues that can extend beyond the tips of their bills to help in food gathering. Once the hole has been bored and the insect is found, the woodpecker sticks his pointed tongue into the hole to pull out the insect.

Since the hummingbird's food is the sweet nectar found deep within flower blossoms, nature has given this bird a long, thin bill for searching deep into flowers. The long tongue, like a tube, can extend beyond the tip of the bill. It can reach into the deepest blossom to suck

the nectar. Tiny insects inside the flowers are also eaten. Changes within the species have caused some hummingbirds to have either longer or shorter bills. Some have bills that straight, curve up, or curve down to fit more easily into flowers that are common in an area.

Birds of prey, such as eagles, owls, hawks, and falcons have sharp-edged, hooked bills that are used to tear bite-sized pieces of flesh from the animals they capture and kill.

Word List :

beak – bill	منقار	backyard	الفناء الخلفي (المنزل)
stout bill	منقار قوي	tender kernel	اللب الطري
bark	لحاء الشجر	woodpecker	نقار الخشب (طائر)
sweet nectar	الرحيق الحلو	hummingbird	الطائر الطنان
birds of prey	الطيور الجارحة	blossom	زهر الشجر المثمر

10. A LITTLE GRASS SHACK :

On world maps the Caribbean islands are shown as being tropical. The economy of the region is based mainly on farming. Farmers are of two types. First is the plantation owner with his spread of hundreds or thousands of acres. The other type is the small cultivator working a few acres of land. Truck farming is done near some of the cities. On some farms families barely manage to get by on what they grow.

As in the early days, sugar is the main product. Other export crops are tobacco, coffee, bananas, citrus fruits and spices. From the West Indies also come oil, asphalt and many forest products. Jamaica’s aluminum ore supplies are the world’s largest. Oil comes from Trinidad, Aruba, and Caracas. But for many of the smaller islands, sugar is the only export.

Ever since America’s colonial days, the Caribbean islands have been favorite places to visit. Since World War II tourism has increased rapidly. Because great numbers of people go there, the islanders have built hotels, developed harbors and airfields, improved beaches, and have expanded sea and air routes.

As in any other part of the world, this area has differences in the ways in which the people live. Those who have money live well indeed. Those who don’t have money live at various levels of poverty. The poor greatly outnumber the wealthy.

A visitor will find rich people living happily in cool, Spanish villas or modern homes and apartments. Their servants might include a cook, a maid, and a nurse for the children.

Most of the people are quite poor, with incomes of only a few hundred dollars or even less. In the towns they live crowded together in rows of tiny houses. The houses are painted in pretty colors when they can afford paint. In the countryside the poor live mainly in shacks or lean-tos that are put together in clever ways. Many poor people live in thatched-roof huts so typical of the tropics. Trees and flowering shrubs sometimes add an interesting background.

Word List :

plantation owner	صاحب مزرعة	citrus	الحمضيات (ليمون – برتقال)
spices	توابل	outnumber	يتفوق عددياً
apartment	شقة سكنية	tiny houses	بيوت صغيرة
countryside	الريف	shack	كوخ
lean-to	بيت منحدر السطح	shrub	شجيرة

11. INSTRUMENT OF FREEDOM :

Many critics have told us by now that the auto should stand accused of a number of sins. It has, they say, ruined family ties, helped to destroy our cities, shifted patterns of trade and living, changed the social structure of the nation, and affected the economy.

It has been found to be a major factor in air pollution. Its parking lots and highways gobble up the landscape and steal away our space. And we often wish we could find a way to get from here to there without having to cope with traffic.

But does any of this mean that we're finished with the auto? Not by a long shot, we're just entering into a new and more mature relationship with it.

The problems, after all, have come about because so many of us have wanted cars so much. The auto wasn't forced on us. On the contrary, it has always been a tool of social change. It is the average citizen who has used the auto to break out of his economic or social mold.

For the farmer, it meant the end of his rural isolation. For the factory worker, it meant a chance to live much better than in the

shadow of the mill. For the city dweller, it mean a chance to pull up stakes and give his family some breathing space in the suburbs.

We have wanted the auto, and still do, for the special kind of personal freedom it gives us. Public transportation, say the auto critics, is much more efficient for moving large numbers of people to city jobs. But it can never give us what the auto does.

How about pleasure trips to places where trains and buses don't go? How about exploring backcountry roads or coastlines?

And there it is what the auto is really all about freedom. For millions of people the auto has been the symbol of free choice. As society gets more complex, we'll have difficult decisions to make. But give up free choice? This is not likely. It's what created our nations in the first place, and it has always been in our blood.

Word List :

social structure	البناء الاجتماعي	gobble up	يلتهم
social change	التغير الاجتماعي	social mold	قالب اجتماعي
mature relationship	علاقة ناضجة	city dweller	أحد ساكني المدينة
symbol	رمز	free choice	اختيار حر

12. BUYING A LADDER :

Ladders once were simple constructions of wood timbers and cross pieces, notched and bound with thongs. Today, the range of ladder designs, types, sizes and materials is broad enough to meet all needs.

Before one makes a trip to the store to buy a ladder, he should think about his need. Will the ladder be used indoors or outdoors? How high will he want to climb? Who will be using it? Where will it be stored ?

If he lives in an apartment, he will need a stepladder, which will meet his needs and will be easy to handle. Its size will depend on the highest point he wants to reach. He should remember that he must never stand on the top of a stepladder.

A person who lives in a house may need two ladders, a stepladder for indoor work and a straight ladder or extension ladder for use outdoors. The outdoor ladder should be long enough to extend a minimum of three feet higher than the highest area he wants to reach.

A person who is buying a stepladder should never be hurried into making a quick purchase. The ladder should be checked for weak steps, loose rungs, or other weaknesses before it is taken form the store.

A buyer should check to see if the name of the manufacturer or distributor appears on the label. This information may be important in case of a quality or accident problem.

Wood, aluminum, magnesium and fiber glass are the principal materials used in the construction of modern ladders. Each type has its advantages and disadvantages.

Wood ladders are sturdy and bend little under loads for which they are designed. They are heavier than metal ladders, and large sizes are harder to handle. When dry, wood ladders are safe to use around electrical circuits or when a person is working with power tools.

Metal ladders are a little more expensive than wood ladders of the same quality. They last longer because they do not decay from moisture and sunlight and are not attacked by insects. Aluminum and magnesium ladders are light, weighing only about two-thirds as much as those made of wood.

Fiberglass is the newest material to appear on the ladder market. It is used to make the side rails of high-grade metal stepladders. The result is a ladder that is light, rust resistant, serviceable and practically carefree.

Word List :		rust resistant	مقاوم للصدأ
step ladder	سُلم متنقل	straight ladder	سلم يسند على حائط
weak step	درجة سُلم غير متينة	construction	بناء – تركيب
sturdy	ثابت – قوي	decay from moisture	يتلف من الرطوبة
serviceable	مفيد – نافع – متين	care free	خال البال

13. CHANGES IN THE ENVIRONMENT :

The environment is everything around you. It can be living, like a forest, or nonliving, like a rock mountain. An environment can be natural or man-made.

There are many kinds of environments. There are cities, small towns, farms, oceans, lakes, deserts, grasslands, forests, and tundra, and even more. Every environment has its own grouping of non-living things such as air, water, and soil. It also contains living things such as

birds, fish, insects, and plants. Man-made environments, such as cities, have living things and non-living things. Every environment is affected by temperature, winds, rainfall and other factors which we call weather or climate.

Many animals and plants are found in only one kind of environment. Man, however, can be found in almost all environments. He can even visit places where he needs special equipment to live such as the moon.

No living thing can live alone. Every living thing depends upon and interacts with other living and non-living things in its environment. These interactions never stop, but they can be changed. Hurricanes, floods, and fires can changes these interactions. By what they do, people can change interactions too.

Some things that people do cause no change or only a small change in an environment. For example, people can walk through the woods and just look. People can cut only a few trees from a large area and still not change most of the interactions. Some things that people do cause a lot of change. Cutting down a forest to grow crops, build houses, or make paper can change the interactions of a whole environment.

Some things that people do almost replace the interactions of a natural area with man-made or artificial interactions. Most cities have some plants and animals. But cities are mostly man-made things.

A little change is not always good for the environment, and a lot of change is not always bad for the environment. People have the power to make choices about changing the environment.

When people make wise choices, then interactions in the environment stay healthy. This helps insure future supplies of things that people need. This wise use of the environment is often called conservation. When people make bad choices, interactions in the environment are often harmed. People sometimes repair the harm, but if they don't, then substances which are harmful to living things, may cause pollution.

Word List :		pollution	تلوث
nonliving	جماد – غير حي	tundra	سهل أجرد
interaction	تفاعل	substance	مادة

14. BUILDING A DINOSAUR :

Ideas about what dinosaurs looked like have been developed after many years of work and study. They are a blend of the ideas of several people who had studied different bones of a single kind of dinosaur.

The first requirement for arriving at a good idea of the build of a reptile is a nearly entire skeleton. If too much of the animal's skeleton is missing, we may make a serious error. But if the left hind leg is missing and we have the right, we know what the other leg looks like. However, if both hind legs are missing, we must restore them according to a similar reptile whose hind legs are known.

After the nearly entire skeleton has been found, it must be collected with great care. This is a difficult job. And, for some of the large dinosaurs, three months' work may be needed. The specimen is first uncovered and the fossil bone is treated with a preservative such Arabic gum, or one of the plastics. A drawing of the specimen as it lies in the rock is made on cross-ruled paper. A trench two or three feet wide is then dug around the specimen. The depth of the trench is fixed by the width of the specimen and the nature of the rock.

If the specimen is too large to take out in one piece, as most dinosaurs are, it is divided into parts which are numbered as they are taken out. Each section is bandaged in strips of burlap dipped in plaster of Paris. After the plaster has set, the section is turned over and the bottom is sealed with burlap and plaster. The section is labeled with the correct number and the section and number are shown on the diagram.

When all of the sections have been bandaged and numbered, they are packed in strong wooden boxes and shipped to the laboratory.

The work in the laboratory is more involved than that in the field. Great care must be taken to be sure that the bones will be undamaged. In most cases the bones have been broken by natural causes as they lay in the rock before discovery. All the pieces of each bone must be thoroughly cleaned and glued together. This job takes a long time. And a large dinosaur requires the work of three men for four or five years.

Word List :		skeleton	هيكل عظمي
reptile	حيوان زاحف	fossil bones	عظام الحفريات
cross-ruled paper	ورق مربعات	bandage	يربط – يضمد
burlap	خيش – قماش خشن	diagram	رسم تخطيطي

15. HIS MASTER'S VOICE :

In order to teach a dog to come when he is called, the trainer must use a long rope. One end of the rope should be tied to the dog's caller. Then, he should be allowed to go away on his own. His name should be called along with the word 'come'. The rope should be jerked at the same time. The command should be repeated several times while the rope is being jerked. The lesson should be repeated until he obeys the command.

When the dog has learned to come when called, the lesson should be taught without the rope. If he does not come when he is called, the rope must be used again. This lesson should be repeated with and without the rope until he learns to come without it.

Another lesson is teaching the dog to walk on the left side of his trainer. A leash is needed for this lesson. The leash is held in the right hand.

The next step in this lesson is to say 'heel' If the dog runs forward or lags behind, the leash should be jerked and the command should be repeated. Short, quick jerks are more effective than a continuous pull.

When the dog has learned to walk on the correct side, the lesson should be tried without the leash in an enclosed area. If the dog leaves, the leash should be put back on. The lesson should be repeated with and without the leash.

With the dog at heel position, he can learn how to sit. At the same time, his leash should be pulled back and his hips should be pushed down. This lesson can be repeated with the leash, and later without it, until he will sit on command.

The command "down'' means lie down. In the sitting position, the dog is given the command. The leach should then be pulled down. At the same time his shoulders should be pushed gently. If he will not lie down this way, his front legs can be pulled forward until he lies down.

Dogs can be taught to stay in one place. The command 'stay' is given while the dog is held in position. The lesson should be repeated until he will stay even when the trainer is out of his sight.

Word List :		leash	مقود – حبل يستخدم لقيادة دابة
jerk	يجذب بشدة	heel position	وضع القرفصاء

16. THE ICE SHEET :

Glaciers are important in some areas, but hold only a small portion of the world's water and only a small part of the total volume of the world's ice.

The Greenland ice cap is a very different matter. It is thousands of square miles in area and nearly 5,000 feet thick. If melted, it would yield enough water to keep the Mississippi River flowing for thousands of years. Even so, this is less than 10 percent of the total volume of ice caps and glaciers. The greatest single item in the water budget of the world, aside from the ocean itself, is the Antarctic ice sheet.

Since the advent of the International Geophysical Year 1957, much information has been gathered about Antarctica. Data on the thickness of the ice sheet is hard to find but there is enough data to allow an estimate. The area of the ice sheet is about six million square miles.

The importance of this ice may be shown quite briefly. If the Antarctic ice caps were melted at an even rate, it could feed the Mississippi River for more than 50,000 years. It could supply all the rivers in the United States for about 17,000 years. It could be the source of the Amazon River for nearly 5,000 years. In fact, it could feed all the rivers of the world for about 750 years.

The figures about water given here are rather simple, but they are important enough to figure out in order to get them more clearly in mind.

About 97% of all water in the world is in the oceans. Most of the rest is frozen on Antarctica and Greenland. Thus, man must get along with less than 1% of the world's water that is available for freshwater use. Obviously, he must find better ways of using it if he is to survive.

Water is a global concern, and the water cycle knows no national boundaries. There are so many people in the world that man has begun to affect the water cycle certainly on a local scale and very likely on a global scale. To learn more about the world's water and how to use it, many countries have joined together in a program called the International Hydrological Decade. It is aimed at solving the problems of understanding water supplies on a global scale.

Word List :

glacier	نهر جليدي	global concern	اهتمام عالمي
national boundaries	الحدود القومية	on a global scale	بالميزان العالمي
water supplies	إمدادات الماء	even rate	معدل متساو

17. FINGERS OF DISCOVERY :

The forty sightless youngsters came down from the bus, full of questions and wonder. Most of them knew little of what a hawk or an owl might look like- to say nothing of a goat, an elephant, or a lamb.

A few of the children with some sight could see the outlines of an elephant or a donkey. But when it came to visiting a zoo, they, along with their totally blind friends, would use their hands and fingers to explore the forms of animal life. They would thus awaken in themselves the reality that comes from using the old sense of touch.

Guides seated the youngsters in the zoo's theatre. Then one of them named the animals they would 'see', described their habits, and answered the questions that curious children have always asked, "Do owls sleep?" "Do hawks have teeth?" "Do apes make good mothers?"

Afterwards, other guides brought out stuffed owls and hawks, since live ones could not be handled, and let the young fingers discover shape and form. Their comments were mostly about the sense of touch: "Doesn't he feel funny?" "Watch out for that sharp beak !"

Later came the pigs, turtles, and rabbits, a mixture of furs, feathers, shells, and hides, which delighted the group after they had overcome their doubts and first feelings about touching them.

Then they were led into the contact area where they found larger animals. Here they were allowed to feed carrots to the goats, pet the lambs and calves, and feel the wool and horns.

In the baby elephant area, one was reminded of the East Indian legend of the six blind men. Each of them felt some part of the elephant and came up with different ideas of what kind of creature it really was.

The tail, trunk, and ears were touched and talked about while the calm little elephant stood still as if it knew that it was playing a part in an unusual learning process.

A half-serious moment developed when two youngsters, one each side of the elephant, reached for the end of the trunk and

accidentally touched hands underneath. “Aw, that’s you!” said one of them laughing. He realized that it was only the hand of his friend on the other side.

After two hours, the youngsters grew tired. They returned to the theater where they had lunch.

Word List :

fingers of discovery	أصابع الاستكشاف	owl	بومة
hawk	صقر	sense of touch	حاسة اللمس
ape	قرد	first feelings	الأحاسيس الأولى

18. REFINING CRUDE OIL :

Millions of years ago, nature hid our energy sources in crude oil created from remains of ancient animals and plants. Today man breaks them free in hours through an oil refinery.

A refinery is miles of pipe, valves, tanks, pressurized vessels, controls, meters and towers standing on hundreds of acres.

It uses heat and pressure and other methods to undo and redo what was done naturally perhaps fifty million years ago, also by heat and pressure. And it starts with the crude oil. Some people think it is black and thick, but sometime it is amber and as thin as water. It is often found as deep as 30,000 feet below the earth’s surface.

The crude is a mixture of some of nature’s basic building blocks. Hydrogen and carbon tied together chemically in molecules. It also contains other substances, such as sulfur.

The refinery cuts the strings of these hydrocarbon molecules, separating them. It changes low-value hydrocarbons into usable ones by chemical juggling. And it cleanses them of impurities, primarily sulfur. Some refining units tear big, heavy molecules of oil apart into lighter, smaller ones. Others join small molecules into larger ones. Unwanted molecules are twisted into new shapes.

Refining begins with separation in a tower that may stretch twelve stories high. Inside it are dozens of trays. Heated crude is piped in near the bottom.

Portions of the crude turn into vapor and rise. As the vapors rise, they condense according to their boiling points and collect on the trays much as water collects in a steamy bathroom.

Light gasoline comes off the top. Other liquids fall out at other levels in the tower. Home heating oils, diesel fuels and kerosene come

out at the middle. From the bottom come such heavy oils as asphalt and what's known as No.6 heating oil-used in firing foundry blast furnaces and electric power plants, for instance.

There is the ability to make nearly all gasoline from some refining units in the summer. Or one can increase production of heating fuels for the winter months.

But there is a limit. At best, the key units will produce no more than 40% in heating oils, because of the way that the molecules are split.

During much of the past century, when kerosene for lamps was the major product of refineries, gasolines were dumped in many places as useless and dangerous waste products.

Word List :			
oil refinery	مصفاة البترول	crude oil	البترول الخام
molecules	الجزيئات	twelve stories high	بارتفاع اثني عشر طابقاً
boiling point	درجة الغليان	waste product	مخلفات الإنتاج

19. FEARLESS GLOBE-TROTTERS :

Birds like bobwhite, quail and cardinals never fly more than ten miles from the nests where they were hatched. But arctic terns are true globe-trotters. These birds nest in Greenland and the northern part of North America. A few are found as far south as Massachusetts. As soon as the young are grown, those from Eastern North America cross the Atlantic Ocean to Europe. A few months later they can be found in the Antarctic regions, 11,000 miles from their nesting grounds. They fly at least 25,000 miles each year in migrating.

Most North American birds, however, spend winters in southern United States and Central and South America. Coastal marshes along the Gulf of Mexico and along the South Atlantic Coast of the United States serve as the winter home for hundreds of thousands of ducks.

Migrating birds face many dangers during their long journeys. Aerial objects such as television or radio towers are responsible for the deaths of thousands each year. Planes landing and taking off at airports and airport towers are also dangerous for birds flying at night because some are drawn to the light during foggy weather.

The famous Washington Monument, which is lighted by large searchlights, kills many birds, especially when there are gusty winds

and a low cloud cover. The Statue of Liberty, when the torch was kept lighted, caused massive destruction of birds.

Storms also kill many birds, particularly the smaller ones. Inland hailstorms kill great numbers. Those crossing large stretches of water are sometimes forced down and drown.

But birds like the sandpipers, plovers, and terns are able to make long overseas flights. For example, the golden plover, traveling the Atlantic oceanic route from Nova Scotia to South America, covers the entire distance of 2,400 miles without stopping. Although much fat is lost, the bird seems little worse for wear as a result of its journey.

Bird migration had its start such a long time ago that it is only possible to guess at how it all began. Some aspects of migration, particularly routes of travel and time of year have been worked out largely through banding efforts and sightings from planes, radar, and miniature radio transmitters. Interested observers and laboratory experiments have also contributed to the growing knowledge. But much of bird migration is still a mystery for future generations of scientists and amateur naturalists to explore.

Word List :		bobwhite	طائر الحجل
globe-trotter	كثير السفر	coastal marshes	المستنقعات الساحلية
searchlight	كشاف للإضاءة	overseas	عبر البحار
plover	طائر الزقزاق	future generations	الأجيال القادمة

20. FELINE FRIENDS

Domestic cats are classified as either long-haired or short-haired. Long-haired types were developed in Persia and Afghanistan. Short-haired types were developed in Egypt, Europe, and Asia.

Usually, short-haired cats are active and playful, and easier to care for than long-haired ones. Long-haired cats are quiet, stay-at-home pets, but they sometimes need extra care because of their long hair.

A person can buy a bed for his cat or he can make one from a box or basket. The bed should be in a quiet part of the home away from drafts. It should be lined with a blanket, cushion, or discarded clothing. The bedding must be kept clean.

A cat should have a balanced diet. Cat foods from the market usually provide good nourishment under normal conditions.

A cat should not be given small bones that are likely to splinter, especially bones from pork or poultry.

Although a cat may lick his bowl clean, it should be washed after each use. Fresh water should be available at all times. The same bowl should not be used for water as is used for food.

Kittens usually are weaned when they are about six to eight weeks old. They keep some of their baby teeth until they reach six months. They must be fed four times a day until they lose their baby teeth. As the kittens grow, they will gradually eat more food. The number of feedings will decrease to twice daily by the time they are eight or nine months old.

Normally cats should not be bathed. They clean their fur by licking it. If a cat gets dirty, he may be bathed in warm, soapy water. His skin must be rubbed thoroughly with a cloth. The water must be kept out of his eyes and ears. He must be rinsed in warm water and dried thoroughly. He must be kept indoors until completely dry.

Cleaning preparations for cats also may be used. A cat must be brushed often, especially if he has long hair. Brushing gets loose hairs out of his coat that otherwise would get on the furniture and rugs. Knots form in the coats of long-haired cats. The knots can be pulled apart with a comb. If that fails, blunt scissors can be used.

Word List :		long-haired	ذو شعر طويل
feline friend	صديق غادر (ماكر)	short-haired	ذو شعر قصير
balanced diet	وجبة متوازنة	wean	يفطم – يمنع من الرضاعة
kitten	هرة صغيرة	coat	جلد الحيوان– فراء

21. BUILDING A GIANT :

As soon as his plan had been approved by the men who had sent him to America, the young sculptor, Frederic Auguste Bartholdi, started working on the designs of the Statue of Liberty. By 1875, he had already made several small study models.

The most difficult problems were involved in the details of building. In solving them the sculptor had no guide but his own genius. The material must be light, easily worked, and of good appearance. It had to be strong enough to stand the stress of a long ocean voyage. It had to withstand the effects of the salty air of New York Harbor. Copper was chosen as the material. The framework

would be of iron and steel.

To get the form for the statue, Bartholdi made a study model measuring about nine feet in height. Another model four times larger was made, giving the figure a height of 36 feet. This model was correct in every detail. Then the statue was divided into sections. Each of these was also to be made four times its size. These pieces, when jointed together, would form the huge statue in its finished shape.

Only a small part of such a gigantic statue could be worked on at time Section by section, the 36-foot model was enlarged to four times its size. For each section of the enlarged model it was necessary to take about 9,000 separate measurements. When a section was finished, the carpenters made wooden molds.

On these molds, thin copper sheets were pressed and hammered into shape. More than 300 separate sheets of copper, each hand-hammered over a single mold, went into the statue to form the figure.

The framework, too, is worthy of attention. It was designed and built by the great French engineer, Gustave Eiffel, who afterwards constructed the famous Eiffel Tower in Paris. Four huge iron posts run from the base of the statue to the top, forming a pyramid which bears the weight of the whole structure. Out of this central tower is built a maze of smaller beams, each supporting many outer copper sheets. Each sheet is backed by an iron strap to give it stiffness. These iron straps are fastened to the supporting framework in such a way that each section is supported separately.

Word List:		sculptor	مثّــال – نحــات
good appearance	مظهر جيد	easily worked	(مادة) سهلة التشكيل
withstand	يصمد – يقاوم	framework	هيكل
measurements	مقاسات – قياسات	mold	قالب – شكل – يشكل
stiffness	صلابة	iron straps	أربطة حديدية

22. TODAY'S DRUG CULTURE:

Sometimes when you take a common drug, you may have a side effect. That is, the drug may cause some effect other than its intended one. When these side effects occur, they are called adverse reactions. Whenever you have an adverse reaction, you should stop taking the drug right away. Ask your pharmacist whether he can suggest a drug that will relieve the symptoms but that will not cause

the adverse reaction. If an adverse reaction to a drug is serious, consult your doctor for advice at once.

Drugs that are safe in the dosage stated on the label may be very dangerous in large doses. For example, aspirin is seldom thought of as dangerous, but there are many reports of accidental poisoning of young children who swallow too many for their young bodies to handle. In adults, excessive use of some pain-killing drugs may cause severe kidney damage. Some drugs for relief of stomach upsets, when taken in excess, can cause an upset in the body's secretion of enzymes, perhaps causing serious digestive problems. You should never use any over-the-counter drug on a regular, continued basis, or in large quantities, except on your doctor's advice. You could be suffering from a serious illness that needs a doctor's care.

Each drug you take not only acts on the body but may also alter the effect of any other drugs you are taking. Sometimes this can cause dangerous or even fatal reactions. For example, aspirin increases the blood-thinning effect of drugs given to patients with heart disease. Therefore, a patient who has been taking such a drug may risk hemorrhage if he uses aspirin whenever he gets a headache. Before using several drugs together you should ask your doctor and follow his advice. Your pharmacist can tell you whether certain drugs can safely be taken together.

Experts believe there is a relationship between adult abuse of legitimate medicines and the drug culture that has swept our country. You can do your share to reduce the chances that your children will become part of the drug culture by treating all medicines with respect. Always let your children know that medicines and drugs should not be used carelessly.

Word List:		a common drug	دواء شائع الاستخدام
side effects	أعراض جانبية (لدواء)	adverse reaction	رد الفعل العكسي
symptoms	أعراض	dosage	جرعة
kidney damage	فشل كلوي	secretion	إفراز
fatal reactions	تفاعلات خطيرة	hemorrhage	نزيف
sleeping pills	الحبوب المنومة	used carelessly	يستخدم بلا مبالاة

23- THE GREAT ICE AGE:

The Great Ice Age was a period of many widespread glacier formations. During this time, mountain glaciers formed on all continents. The ice caps of Antarctica and Greenland were more extensive and thicker than today. And vast glaciers, in places as much as several thousand feet thick, spread across northern North America and Eurasia.

Almost a third of the present land surface of the earth was ice-covered. Even today remnants of the great glaciers cover almost a tenth of the land. This indicates that conditions similar to those, which produced the Great Ice Age are still operating in polar climates.

Much has been learned about the Great Ice Age glaciers because evidence of their presence is widespread. Similar conditions can be studied today in Greenland, Antarctica, and in many mountain ranges where glaciers still exist. It is possible, therefore, to reconstruct in large part the extent and general nature of the glaciers of the past, as well as to interpret their impact on the physical and biological environments.

Historically, the climate has changed periodically, just as the general character of the earth's surface has changed. There is evidence that at time in the past glacier formations occurred long before the Great Ice Age.

Following a period of warm climate, a worldwide refrigeration initiated the Great Ice Age glaciers. The climate was cooler and wetter and at times warmer and drier than today. Many attempts have been made to account for these climatic changes. Their ultimate cause, however, is not well understood. Although we cannot predict a period of climatic cooling, another ice age in the future is a possibility.

Although the Great Ice Age began a million or more years ago, the last major ice sheet to spread across north-central United States reached its maximum extent about 20,000 years ago. It lingered in Canada until about 6,000 years ago when it finally disappeared by melting. Mountain glaciers are today the only remnants of the great glaciers of the past on the mainland of North America.

Word List:		extensive and thicker	أكبر وأسمك
Eurasia	مناطق في أسيا وأوروبا	ice-covered	مغطىٍ بالجليد
polar climate	المناخ القطبي	periodically	دورياً
remnants	بقايا	glacier	نهر جليدي

24. THE MYSTERY OF MIGRATION:

The migration of birds usually refers to the regular flights between their summer and winter homes. Except for those that nest in the tropics, nearly all North American birds migrate. Some travel great distances while others go only a short way.

This seasonal movement has long been a mystery to man. Aristotle, the naturalist and philosopher of ancient Greece, noticed that cranes, pelicans, geese, swans, doves, and many other birds moved to warmer places to spend the winter. He started superstitions that were believed for hundreds of years. For example, Aristotle thought that many birds spent the winter sleeping in hollow trees, caves, or beneath the mud in marshes.

Many scientists believe that birds migrate north to south because of inclement weather. These birds began this journey originally because they were driven southward by the advancing ice age.

Many birds feed almost entirely upon insects. Another theory holds that birds migrate to areas where insects are plentiful. When winter arrives, insects disappear and the birds would starve unless they moved southward. You may wonder, then, why insect eaters fly north again with the coming of spring, when there are many insects at winter homes.

A more realistic theory is that birds have a lasting impression of their birthplace, resulting in a lifelong urge to return to this locale each spring.

Recently scientists have found that length of day is the triggering force that prepares many birds for their migratory journeys. The change in length of day brings the birds into breeding condition and causes them to seek their northern nesting grounds.

In North America, it is possible to see migrating birds almost every month of the year. Some birds start south early in July, while others remain north until pushed out by either severe weather or shortage of food. Soon after hardy travelers reach winter homes, other equally hardy migrants start north on the heels of winter. In their eagerness to reach northern nesting grounds, early spring migrants sometimes arrive too soon and are caught in sudden storms and perish.

Most small birds and many larger ones migrate by night. Although most birds seen helpless in the dark, there are good reasons for this nighttime travel. Some are poor fliers. Even good fliers can

fall easy prey to hawks, which feed and migrate in daylight. Also, night migrants have daylight hours for feeding.

Many kinds of swimming birds migrate either by day or night. Such birds usually feed at all hours and rarely depend on hiding to escape enemies.

Word List:		insect eaters	الطيور آكلة الحشرات
migrate	يهاجر	superstitions	خرافات
marshes	مستنقعات	southward	جنوباً – نحو الجنوب
lifelong	مستمر مدى الحياة	migratory journey	رحلة الهجرة
hardy	شجاع – جرئ	perish	يَهلك
daylight hours	ساعات النهار	hawks	الصقور

25. A LIVING LINK :

In a land with a story as old as that of Britain, the past is an important part of the people's way of life. The Royal Family is a link with the kings and the tales of the past. To the British, Queen Elizabeth II is a symbol of Britain's unity. Wherever and whenever she appears, she is given respect and warm feelings.

Many of the old customs, which are part of this respect for the Royal Family are still followed today.

Even in this modern age the Monarch's Champion can be seen in the parade held when a new ruler takes the throne. The knight who had this title rode his horse into the banquet hall where the new king was dining. There he shouted out a challenge to fight anyone who did not believe that the new king was the rightful heir to the throne.

In late October or early November the queen personally takes part in another old and colorful ceremony. This is the opening of parliament. From Buckingham Palace to the Parliament, thousands of people line the streets to see their ruler pass in a horse-drawn carriage.

Another old ceremony takes place in London in early June. It is the queen's Birthday Parade since it marks the official birthday of the ruler. This is an important military event. It is a time when the queen inspects units of the Brigade of Guards.

Some of the British customs are not related to the life of the Royal Family.

A yearly event with an old beginning is Guy Fawkes Day, November 5. This makes the day in 1605 on which Fawkes tried to blow up the Parliament buildings. Now, weeks before the event, in

every part of the United Kingdom children carry a homemade, stuffed likeness of Fawkes and ask for “a penny for the Guy” The money they collect is spent for fireworks and candy.

Only a few days later is the City of London’s finest show. This marks the day when the elected Lord Mayor of the City of London takes office. For the event the Lord Mayor is carried from the Guildhall to the law-courts in a horse-drawn coach. There an agent of the ruler meets him and his election is made official.

Word List:		Parade	عرض عسكري
Monarch’s Champion	حارس المملكة	ceremony	مراسم
throne	العرش	fireworks	ألعاب نارية
a horse-drawn carriage	عربة تجرها خيول	Mayor	محافظ–رئيس البلدية
The Royal Family	العائلة المالكة	coach	مركبة كبيرة
agent of the ruler	نائب عن الحاكم	Guildhall	مبنى البلدية

والآن وبعد أن تدربت على ترجمة موضوعات عديدة في مجـــالات مختلفـــة إلـــى اللغـــة العربية، حاول ترجمة موضوع أدبي يتمثل في القصة القصيرة التالية التـــى تخيـــل فيهـــا الكاتب في الأربعينات من القرن الماضي، ما يمكن حدوثه عام ١٩٨٥م :

There Will Come Soft Rains

By: Ray Bradbury

The house was a good house and has been planned and built by the people who were to live in it, in the year 1980. The house was like many other houses in that year; it fed and slept and entertained its inhabitants and made a good life for them. The man and wife and their two children lived at ease there, and lived happily, even while the world trembled. All of the fine things of living, the warm things, music and poetry, books that talked, beds that warmed and made themselves, fires that build themselves in the fireplace of evenings, were in this house, and living there was a contentment.

And then one day the world shook and there was an explosion followed by ten thousand explosions and red fire in the sky and a rain of ashes and radio activity, and the happy time was over.

In the living room the voice-clock sang, *Tick-tock seven A.M. o'clock, time to get up!* as if it were afraid nobody would. The house lay empty. The clock talked on into the empty morning.

The kitchen stove sighed and ejected from its warm interior eight eggs, sunny side up, twelve beef slices, two coffees, and two cups of hot cocoa. *Seven nine, breakfast time, seven nine.*

Today is April 28^{th}, said a phonograph voice in the kitchen ceiling. 'Today, remember, is Mr. Featherstone's birthday. Insurance, gas, light and water bills are due.'

Somewhere in the walls, relays clicked, money tapes glided under electric eyes. Recorder voices moved beneath steel needles:
Eight one, run, run, off to school, off to work, run, run, tick-tock eight one o'clock !

But no doors slammed, no carpets took the quick tread of rubber heels. Outside, it was raining. The voice of the weather box on the front door sang quietly: 'Rain, rain, go away, rubbers and raincoats for today. And the rain tapped on the roof.

At eight thirty the eggs were shriveled. An aluminum wedge scraped them into the sink, where hot water whirled them down a metal throat which digested and flushed them away to the distant sea.

Nine fifteen, sang the clock, time to clean.

Out of the warrens in the wall, tiny mechanical mice darted. The rooms were full with the small cleaning animals, all rubber and metal. They sucked up the hidden dust, and popped back in their burrows.

Ten o'clock. The sun came out from behind the rain. The house stood alone on a street where all other houses were rubble and ashes. At night, the ruined town gave off a radioactive glow which could be seen for miles.

Ten fifteen. The garden sprinkler filled the soft morning air with golden fountains. The water tinkled over the charred west side of the house where it had been scorched evenly free of its white paint. The entire face of the house was black, save for five places. Here, the silhouette, in paint of a man mowing a lawn. Here, a woman, bent to pick flowers. Still farther over, their images burned on wood in one titanic instant, a small boy, hands flung in the air -higher up, the image of a thrown ball- and opposite him a girl, her hands, raised to catch a ball which never came down.

The five spots of paint -the man, the woman, the boy, the girl, the ball- remained. The rest was a thin layer of charcoal.

The gentle rain of the sprinkler filled the garden with falling light.

Until this day, how well the house kept its place. How carefully it had asked, 'Who goes there?' and getting no reply from rain and lonely foxes and whining cats, it had shut up its windows and drawn the shades. If a sparrow brushed a window, the shade snapped up. The bird, startled, flew off! No, not even an evil bird must touch the house.

And inside, the house was like an altar with nine thousand robots attendants, big and small, servicing, attending, singing in choirs, even though the masters had gone away and the ritual was meaningless.

A dog whined, shivering, on the front porch.

The front door recognized the dog voice and opened. The dog padded in wearily, thinned to the bone, covered with sores. It tracked mud on the carpet. Behind it whirred the angry robot mice, angry at

having to pick up mud and leaves, which, carried to the burrows, were dropped down cellar tubes into an incinerator which sat like an evil Baal in a dark corner.

The dog ran upstairs hysterically yelping at each door. It pawed the kitchen door widely .

Behind the door, the stove was making pancakes which filled the whole house with their odor.

The dog frothed, ran insanely, spun in a circle, biting its tail, and died.

It lay in the living room for an hour.

One o'clock.

Delicately sensing decay, the regiments of mice hummed out of the walls, soft as brown leaves, their electric eyes blowing.

One fifteen.

The dog was gone.

The cellar incinerator glowed suddenly and a whirl of sparks leaped up the flue.

Two thirty five.

Bridge tables spouted from the patio walls. Playing cards fluttered onto pads in a shower of pipes. Martinis appeared on an oaken bench.

But the tables were silent, the cards were untouched.

At four thirty the table folded back into the wall.

Five o'clock. The bathtubs filled with clear hot water. A safety razor dropped into a wall-mould, ready.

Six, seven, eight nine o'clock.

Dinner made, ignored, and flushed away; dishes washed; and in the study, the tobacco stand produced a cigar, half an inch of gray ash on it, smoking, waiting. The hearth fire bloomed up all by itself, out of nothing.

nine o'clock. The beds began to warm their hidden circuits, for the night was cool.

At ten o'clock, the house began to die.

The wind blew. The bough of a falling tree smashed the kitchen window. Cleaning solvent, bottled, crashed on the stove.

'Fire!' screamed voices. 'Fire!' Water pumps shot down water from the ceilings. But the solvent spread under the door, making fire as it went, while other voices took up the alarm in chorus.

The windows broke with heat and the wind below in to help the fire. Scurrying water rats, their copper wheels spinning, squeaked from the walls, squirted their water, ran for more.

Too late! Somewhere, a pump stopped. The ceiling sprays stopped raining. The reserve water supply, which has filled baths and washed dishes for many silent days was gone.

The fire crackled upstairs, ate paintings, lay hungrily in the beds ! It devoured every room.

The house was shuddering, oak bone on bone, the skeleton cringing from the heat, all the wires revealed as if a surgeon had torn the skin off to let the red veins quiver in scalded air. Voices screamed, 'help, help, fire, run!' Windows snapped open and shut, like mouths, undecided. Fire, run! the voices wailed a tragic nursery rhyme, and the silly Greek chorus faded as the sound-wires popped their sheathings. Ten dozen high, shrieking voices died, as emergency batteries melted.

The crash! The attic smashing kitchen into cellar and subcellar. Deep freeze, armchairs, filmtapes, beds, were thrown in a cluttered mound deep under.

Smoke and silence.

Dawn shone faintly in the east. In the ruins, one wall stood alone. Without the wall, a voice said, over and over again and again, even as the sun rose to shine upon the heaped rubble and steam:

Today is April 29th, 1985. Today is April 29th, 1985. Today is.. .. ..

Word List:		thin layer of charcoal	طبقة رقيقة من الفحم
contentment	رضا – قناعة	radio activity	نشاط إشعاعي
porch	مدخل مسقوف – شرفة	burrow	حجيرة – ملجأ – مكان لحفظ شئ
incinerator	محرقة قمامة	radio active glow	وهج النشاط الإشعاعي
titanic	هائل – جبار	run insanely	يجري كالمجنون
yelping	ينبح	shuddering	يهتز – يرتعش
bathtub	حوض استحمام– بانيو	hearth	موقد – مدفأة
smash	يحطم – يهشم	scalded	حارق – محترق
subcellar	القبو الأدنى	emergency	طوارئ

surgeon	جَرّاح	snapped open and shut	تفتح وتغلق بسرعة
cellar	الدرك الأسفل	reserve water supply	الماء المخزن
devour	يلتهم – يفترس	oaken bench	مقعد مصنوع من البلوط
untouched	لم تمس	fireplace	المدفأة – المستوقد
regiments	أفواج – مجموعات	odor	رائحة
sparrow	عصفور	masters	سادة (أهل البيت)